

Second B.Pharm (Ayurveda) Degree Examinations, October 2015

Pharmaceutical Engineering

Time: 3 Hours

Total Marks: 100

- Answer all questions.

Essays:

(2x10=20)

1. Define drying. Discuss the principle, construction and working of a fluidized bed dryer with neat diagram
2. Define corrosion. Explain various types of corrosion and enlist the approaches for prevention of corrosion

Answer briefly:

(10x5=50)

3. Working of Swenson-Walker crystallizer
4. Energy conservation equation used in fluid studies
5. Suggest a suitable mixer and its operation for mixing of viscous liquids.
6. Fractional distillation
7. Various factors that influence the selection of milling equipment for size reduction.
8. Working of multiple effect evaporator
9. Working of a centrifuge used for the separation of two liquid phases as in case of emulsion
10. Differentiate continuous and batch filter and explain with example
11. Mc-Cabe Thiele method used for the calculation of number of theoretical plates used for distillation.
12. Importance of stainless steel and glass in pharmaceutical industry

Short notes:

(10x3=30)

13. Bound moisture and free moisture content
14. Define crystal and crystal lattice
15. Define the term black body and grey body
16. What is Reynold's number and mention its importance
17. Working of V-cone blender
18. Define conveyor and list the conveyors used in industries
19. Effects of temperature on evaporation
20. Differentiate: Orifice meter and Venturi Meter.
21. Check valves
22. Rittinger's theory
